

GenCore version 5.1.7
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OM protein - nucleic search, using frame_plus_p2n model

Run on: March 3, 2006, 08:29:11 ; Search time 3415 Seconds
(without alignments)
1959.166 Million cell updates/sec

Title: US-10-759-548B-5
Perfect score: 706
Sequence: 1 MALSLSLAPLAVALSAGAG.....SDYDNVTGALPYLVKVRKAN 143

Scoring table: BLOSUM62

Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 41078325 seqs, 23393541228 residues

Total number of hits satisfying chosen parameters: 82156650

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODEL=frame+ p2n.model -DEV=xlh
-Q=/abs/ABSWEB_epool/US10759548/runat_02032006_160942_17044/app_query.fasta_1
-DB=EST -QMT=fastcap -SUFFIX=rrt -MINMATCH=0.1 -LOOPEXT=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL
-OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -HOST=abs07
-USER=US10759548 @CGN_1_1_6731 @runat_02032006_160942_17044 -NCPU=6 -ICPU=3
-NO MMAP -NEG SCORES=0 -WAIT -DSPBIOCK=100 -LONGLOG -DEV TIMEOUT=120
-WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : EST:*

1: gb_est1:.*
2: gb_est2:.*
3: gb_est3:.*
4: gb_hic:.*
5: gb_est4:.*
6: gb_est5:.*
7: gb_est6:.*
8: gb_est7:.*
9: gb_gss1:.*
10: gb_gss2:.*
11: gb_gss3:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	706	100.0	443	3	BI358791 949040H08
2	706	100.0	555	3	BI478792 949070F06
3	706	100.0	593	3	BI993293 1020075G1
4	706	100.0	803	1	AI001298
5	706	100.0	868	4	AY108827 Zea mays
6	687	97.3	554	2	BG410559
7	686.5	97.2	643	7	CN141441

8	679	96.2	626	5	B0635741
9	678.5	96.1	731	6	CA236566
10	675.5	95.7	525	6	CA128302
11	673	95.3	430	2	BI233829
12	658	93.2	412	2	BG317125
13	656.5	93.0	573	8	DN144120
14	654	92.6	538	2	BG354513
15	654	92.6	542	5	BU092662
16	650	92.1	755	2	BG320303
17	641	90.8	499	3	BI359221
18	623.5	88.3	540	6	CA301023
19	623	88.2	489	2	BG549199
20	612	86.7	482	2	BG458495
21	585	82.9	363	2	BI096564
22	576	81.6	871	1	AI374506
23	558	79.0	396	2	BG458566
24	547	77.5	606	2	BG462527
25	530.5	75.1	819	10	CZ296823
26	529	74.9	336	3	BI478541
27	523	74.1	335	2	BG462521
28	521	73.8	387	2	BG550202
29	507.5	71.9	685	10	CW239849
30	502	71.1	469	3	BM380889
31	497.5	70.5	441	10	CL965086
32	497.5	70.5	508	7	CF953034
33	497.5	70.5	748	6	CB679884
34	497	70.4	349	2	BG549200
35	495.5	70.2	536	7	CF955858
36	482	68.3	357	2	BG316582
37	468	66.3	563	2	BG462520
38	466.5	66.1	551	6	CA500123
39	466.5	66.1	579	2	BE425970
40	466.5	66.1	596	3	BM134808
41	466.5	66.1	627	6	CA499879
42	466.5	66.1	644	6	CD931399
43	466.5	66.1	814	8	CV780906
44	466.5	66.1	830	8	CV766226
45	466.5	66.1	840	8	CV777091

ALIGNMENTS

RESULT 1
LOCUS BI358791 443 bp mRNA linear EST 31-JUL-2001
DEFINITION 949040H08.y1 949 - Juvenile leaf and shoot cDNA from Steve Moose
ACCESSION BI358791
VERSION BI358791.1 GI:15053246
KEYWORDS EST.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 443)
AUTHORS Walbot, V.
TITLE Maize ESTs from various cDNA libraries sequenced at Stanford
JOURNAL Unpublished (1999)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Plate: 949040 row: H column: 08.
Location/Qualifiers
1..443
/organism="Zea mays"
/mol_type="mRNA"
/cultivar="W64A"

FEATURES
source

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/db xref="taxon:4577"
/tissue_type="immature leaf primordium and vegetative
meristem"
/dev_stage="4 stages from 3-13 days after imbibing"
/lab_host="E. coli XL0LR"
/clone_lib="949 - Juvenile leaf and shoot cDNA from Steve
Moose"
/notes="Organ: juvenile vegetative shoots; Vector:
PAD-GAL4-2.1; Site 1: EcoRI; Site 2: XhoI; Equal amounts
of total RNA by weight from 4 tissue sources (see below)
were pooled, polyA+ RNA isolated, and cDNA synthesized for
EcoRI (5') and XhoI (3') directional cloning into lambda
Hybridap vector from Stratagene. Tissue Sources: 1. Whole
shoots 3 days after sowing/imbibing in wet soil. 2. Basal
1.5 cm shoots 6 days after sowing - includes yellow
portions of developing leaves 1-5, primordia from 6-8, and
the vegetative apex. 3. Non-green portions of developing
leaves 4-5 and the vegetative apex, including adult leaf
primordia, 9 days after sowing. 4. Partially expanded and
greening leaves 4-5 at 13 days after sowing."

ORIGIN
Alignment Scores:
Pred. No.: 9.13e-60 Length: 443
Score: 706.00 Matches: 143
Percent Similarity: 100.0% Conservative: 0
Best Local Similarity: 100.0% Mismatches: 0
Query Match: 100.0% Indels: 0
DB: 3 Gaps: 0

US-10-759-548B-5 (1-143) x BI358791 (1-443)

Qy 1 MetalLeuSerLeuSerLeuAlaArgProAlaProLeuAlaValSerAlaGlyAlaGly 20
Db 1 ATGGCGCTGTCCTTCCTCCGCGCGCCCGCGCCCTCCGCGCTCCGCGCGCGCGCGCG 60
Qy 21 AlaArgLysLeuProAlaAlaSerLeuAlaPheProAlaLysSerPheGlyAlaPro 40
Db 61 GCCAGGAAGCTACCCGCGCGCGCGCGCTCCGATTCGCGCGGGAATCTCTTCGCGCGCGCG 120
Qy 41 LeuAlaAlaThrAlaAlaSerValAlaSerProLeuProAlaArgLysProAlaThrSerThr 60
Db 121 CTGGCGCGCGCGCGCTCCGCTCGCGTCCGCGTCCGCGCGCGCGCGCGCGCGCGCGCG 180
Qy 61 ThrSerLeuGluValValAlaAlaGlyLysLysGlyTyrLysMetLysThrHisLysAla 80
Db 181 ACCTCGCTCGAGTGTCTCGCGCGCGCGGGAAGAAGGGCTACAAAGATGAAGACGCGCGCGCG 240
Qy 81 SerAlaLysArgPheArgValThrGlyArgGlyLysValLeValArgArgCysAlaGlyLys 100
Db 241 TCGGCGAAGCGGTTCGGGTGACGGGGAGGGGCGAGATGTCGCGCGGTGCGCGCGCGGAG 300
Qy 101 GlnHisLeuLeuAlaLysLysLysThrLysArgLysLysArgLysSerLysMetValGln 120
Db 301 CAGCACTTGTCTGCCAAGAAGAACAACCAAGCGCGAGAGAGGCTCTCGAAGATGGTGCAG 360
Qy 121 ValAsnLysSerAspTyrAspAsnValThrGlyAlaLeuProTyrLeuLysValAsnArg 140
Db 361 GTCACAGAGTGACTACGACATGTTACGGGTGCTACGCGGTGCTACCTCAAGTGAATAG 420
Qy 141 LysAlaAsn 143
Db 421 AAAGCAAC 429

RESULT 2
BI478792/c 555 bp mRNA linear EST 28-AUG-2001
LOCUS 949070F06.x1 949 - Juvenile leaf and shoot cDNA from Steve Moose
DEFINITION Zea mays cDNA, mRNA sequence.
ACCESSION BI478792
VERSION BI478792.1 GI:15323570
KEYWORDS EST.
SOURCE Zea mays

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Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 555)
Walbot.V.
Maize ESTs from various cDNA libraries sequenced at Stanford
University
Unpublished (1999)
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Plate: 949070 row: F column: 06.
FEATURES
Location/Qualifiers
1..555
/organism="Zea mays"
/mol_type="mRNA"
/cultivar="W64A"
/db_xref="taxon:4577"
/tissue_type="immature leaf primordium and vegetative
meristem"
/dev_stage="4 stages from 3-13 days after imbibing"
/lab_host="E. coli XL0LR"
/clone_lib="949 - Juvenile leaf and shoot cDNA from Steve
Moose"
/notes="Organ: juvenile vegetative shoots; Vector:
PAD-GAL4-2.1; Site 1: EcoRI; Site 2: XhoI; Equal amounts
of total RNA by weight from 4 tissue sources (see below)
were pooled, polyA+ RNA isolated, and cDNA synthesized for
EcoRI (5') and XhoI (3') directional cloning into lambda
Hybridap vector from Stratagene. Tissue Sources: 1. Whole
shoots 3 days after sowing/imbibing in wet soil. 2. Basal
1.5 cm shoots 6 days after sowing - includes yellow
portions of developing leaves 1-5, primordia from 6-8, and
the vegetative apex. 3. Non-green portions of developing
leaves 4-5 and the vegetative apex, including adult leaf
primordia, 9 days after sowing. 4. Partially expanded and
greening leaves 4-5 at 13 days after sowing."

ORIGIN
Alignment Scores:
Pred. No.: 1.22e-59 Length: 555
Score: 706.00 Matches: 143
Percent Similarity: 100.0% Conservative: 0
Best Local Similarity: 100.0% Mismatches: 0
Query Match: 100.0% Indels: 0
DB: 3 Gaps: 0

US-10-759-548B-5 (1-143) x BI478792 (1-555)
Qy 1 MetalLeuSerLeuSerLeuAlaArgProAlaProLeuAlaValSerAlaGlyAlaGly 20
Db 527 ATGGCGCTGTCCTTCCTCCGCGCGCCCGCGCCCTCCGCGCTCCGCGCGCGCGCG 468
Qy 21 AlaArgLysLeuProAlaAlaSerLeuAlaPheProAlaLysSerPheGlyAlaPro 40
Db 467 GCCAGGAAGCTACCCGCGCGCGCGCGCTCCGATTCGCGCGGGAATCTCTTCGCGCGCGCG 408
Qy 41 LeuAlaAlaThrAlaAlaSerValAlaSerProLeuProAlaArgLysProAlaThrSerThr 60
Db 407 CTGGCGCGCGCGCGCTCCGCTCGCGTCCGCGTCCGCGCGCGCGCGCGCGCGCGCGCG 348
Qy 61 ThrSerLeuGluValValAlaAlaGlyLysLysGlyTyrLysMetLysThrHisLysAla 80
Db 347 ACCTCGCTCGAGTGTCTCGCGCGCGCGGGAAGAAGGGCTACAAAGATGAAGACGCGCGCG 288
Qy 81 SerAlaLysArgPheArgValThrGlyArgGlyLysValLeValArgArgCysAlaGlyLys 100
Db 287 TCGGCGAAGCGGTTCGGGTGACGGGGAGGGGCGAGATGTCGCGCGGTGCGCGCGGAG 228

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101 GlnHisLeuLeuAlaLysLysAsnThrLysArgLysLysArgLeuSerLysMetValGln 120
 324 CAGCACTTACTCGCCAGAGAGACACCAACGCAAGAGAGGCTCTCCAGATGGTCCAA 383
 121 ValAsnLysSerAspTyrAspAsnValThrGlyAlaLeuProTyrLeuLysValAsnArg 140
 384 GTCAACAAGAGTACTACGACCAATGTGACGGGTGCTACCTACCTCAAGTGAATAGG 443
 141 LysAlaAsn 143
 444 AAAGCAAAC 452
 RESULT 11
 BI233829
 LOCUS 430 bp mRNA linear EST 11-JUL-2001
 DEFINITION 949032H11.y2 949 - Juvenile leaf and shoot cDNA from Steve Moose
 Zea mays cDNA, mRNA sequence.
 BI233829
 ACCESSION BI233829.1 GI:14701411
 VERSION
 KEYWORDS EST.
 SOURCE Zea mays
 ORGANISM Zea mays
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.
 1 (bases 1 to 430)
 Walbot,V.
 Maize ESTs from various cDNA libraries sequenced at Stanford
 University
 Unpublished (1999)
 Contact: Walbot V
 Department of Biological Sciences
 Stanford University
 855 California Ave, Palo Alto, CA 94304, USA
 Tel: 650 723 8227
 Fax: 650 725 8221
 Email: walbot@stanford.edu
 Plate: 949032 row: H column: 11.
 Location/Qualifiers
 1. .430
 /organism="Zea mays"
 /mol_type="mRNA"
 /cultivar="M64A"
 /db_xref="taxon:4577"
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 meristem"
 /dev_stage="4 stages from 3-13 days after imbibing"
 /lab_host="E. coli XL0LR"
 /clone_lib="949 - Juvenile leaf and shoot cDNA from Steve
 Moose"
 /note="Organ: juvenile vegetative shoots; Vector:
 pAD-GAL4-2.1; Site 1: EcoRI; Site 2: XhoI; Equal amounts
 of total RNA by weight from 4 tissue sources (see below)
 were pooled, polyA+ RNA isolated, and cDNA synthesized for
 EcoRI (5') and XhoI (3') directional cloning into lambda
 Hybridap vector from Stratagene. Tissue Sources: 1. Whole
 shoots 3 days after sowing/imbibing in wet soil. 2. Basal
 1.5 cm shoots 6 days after sowing - includes yellow
 portions of developing leaves 1-5, primordia from 6-8, and
 the vegetative apex. 3. Non-green portions of developing
 leaves 4-5 and the vegetative apex, including adult leaf
 primordia, 9 days after sowing. 4. Partially expanded and
 greening leaves 4-5 at 13 days after sowing."
 ORIGIN
 Alignment Scores:
 Pred. No.: 1.6e-56 Length: 430
 Score: 673.00 Matches: 135
 Percent Similarity: 100.0% Conservative: 0
 Best Local Similarity: 100.0% Mismatches: 0
 Query Match: 95.3% Indels: 0
 DB: 2 Gaps: 0

US-10-759-548B-5 (1-143) x BI233829 (1-430)
 QY 9 ArgProAlaProLeuAlaValSerAlaGlyAlaArgLysLeuProAlaAlaSer 28
 Db 2 CGCCCCCGCCCCCTCCGCCCTTTCCGCGCGCGAGAGCCAGGAGCTTACCCGCGCAGC 61
 QY 29 LeuAlaPheProAlaLysSerPhePheGlyAlaProLeuAlaAlaThrAlaAlaSerVal 48
 Db 62 CTGCGATTTCGCGCGGAATCCTTCTTCGCGCGCGCGCTGGCCGCCACCGCGGCTCCGTC 121
 QY 49 AlaSerProLeuProArgLysProAlaThrSerThrThrSerLeuGluValAlaAla 68
 Db 122 GCGTCGCCGCTCCCGCGCAAGCGCGCACCTCCACCACCTCGCTCGAGGTCGTCGCGGCG 181
 QY 69 GlyLysLysGlyTyrLysMetLysThrHisLysAlaSerAlaLysArgPheArgValThr 88
 Db 182 GGAAGAAGGGGCTTACCAAGATGAAGACGACCAAGCGCTCGCGCAAGCGGTTCGCGGTGACG 241
 QY 89 GlyArgGlyLysIleValArgArgCysAlaGlyLysGlnHisLeuLeuAlaLysLysAsn 108
 Db 242 GGGAGGGGCAAGATCGTGGCGGCTGCGCGGGAAGCAGCATTGCTCGCCCAAGAGNAC 301
 QY 109 ThrLysArgLysLysArgLeuSerLysMetValGlnValAsnLysSerAspTyrAspAsn 128
 Db 302 ACCAAGCGCAAGAGAGGCTCTCGAAGATGGTGAAGTCAACAAGAGTGACTACGACAAAT 361
 QY 129 ValThrGlyValAlaLeuProTyrLeuLysValAsnArgLysAlaAsn 143
 Db 362 GTTACGGGTGCACTGCCCTACCTCAAGTGAATAGCAAGCAAAAC 406
 RESULT 12
 BG317125
 LOCUS 412 bp mRNA linear EST 26-FEB-2001
 DEFINITION 947025F08.y1 947 - 2 week shoot from Barkan lab Zea mays cDNA, mRNA
 sequence.
 BG317125
 ACCESSION BG317125.1 GI:13126555
 VERSION
 KEYWORDS EST.
 SOURCE Zea mays
 ORGANISM Zea mays
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.
 1 (bases 1 to 412)
 Walbot,V.
 Maize ESTs from various cDNA libraries sequenced at Stanford
 University
 Unpublished (1999)
 Contact: Walbot V
 Department of Biological Sciences
 Stanford University
 855 California Ave, Palo Alto, CA 94304, USA
 Tel: 650 723 2227
 Fax: 650 725 8221
 Email: walbot@stanford.edu
 Plate: 947025 row: F column: 08.
 Location/Qualifiers
 1. .412
 /organism="Zea mays"
 /mol_type="mRNA"
 /cultivar="B73"
 /db_xref="taxon:4577"
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 /dev_stage="2 week old seedling (3 leaves)"
 /lab_host="XL1-Blue"
 /clone_lib="947 - 2 week shoot from Barkan lab"
 /note="Organ: shoot; Vector: Lambda ZAP (pBlueScript SK-);
 Site 1: EcoRI; Site 2: XhoI; Directionally cloned using
 Stratagene's UniZap XR cDNA cloning kit with the 5' end
 at the EcoRI site. The library represents 8 x 10⁵
 independent recombinant phage. The plants were greenhouse
 grown."